

rejections under 35 U.S.C. §112, second paragraph and to more particularly point out applicant's invention. It is respectfully submitted that the amendments to the specification, abstract and claims do not add new matter, and that such amendments are supported by the specification, claims, abstract and drawings as originally filed.

The objections set forth in the NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW dated February 18, 1994 have been noted. Corrected formal drawings will be submitted after receipt of a Notice of Allowance.

The Examiner has objected to the drawings stating that Figures 3(A) and 3(B) fail to fully illustrate what is disclosed in the specification. The Examiner has required correction of the drawings.

For the reasons set forth below, the Examiner's objection is respectfully traversed.

The Examiner states that at page 11, lines 13-17 the flag S22 is shown as being output from the picture counter (element 27) in Figure 3(A), not from the field memory group (element 11) as is shown. The Examiner further states that correction to the drawing is required to indicate the appropriate output point of the picture start flag, S22, if it is output from the field memory group (element 11) as is disclosed.

It is respectfully submitted that the specification is entirely consistent with Figure 3(A) of the drawings. At page 11, line 14, the specification teaches that "The field memory group 11 *raises* an undermentioned picture start flag S22..." (emphasis added). The specification does not say, as the Examiner appears to allege, that the field memory group (element 11) *outputs* the picture start flag S22. It is further respectfully submitted that the term "raises" in the context of the specification and drawings means "to bring about".

The Examiner states, with respect to page 14, lines 1-8, that the "mode switching means" is not indicated anywhere in Figures 3(A) or 3(B), and that this is the first and only mention of the mode switching means in

Q

disclosure, and it is not adequately defined to the Examiner where the mode switching means is located. The Examiner further states that the generated mode flag S9 is output from the motion compensation block, and that the indication from the drawings (Figure 3(A)) is that the mode switching means is actually the motion compensation block. The Examiner has required further clarification.

It is respectfully submitted that the Examiner's observation from the indication in the drawings is basically correct, in that the "mode switching means" is in fact the motion compensator (element 18) (the Examiner referred to such block as "the motion compensation block) as shown in Figure 3(A). Page 14, line 1, has been amended to replace "mode switching means" with --motion compensator 18--. It is respectfully submitted that such amendment is supported by the specification at page 14, lines 1-8 and in Figure 3(A) of the drawings.

The Examiner has rejected claims 1-14 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, the Examiner states that in claim 1, lines 5 and 9, "so operated as to transmit" and "to transmit" should be changed to "for transmitting". It is respectfully submitted that such phrases appear in claim 1 at lines 11 and 14, respectively, and not at lines 5 and 9 as stated by the Examiner. Claim 1 has been amended at lines 11 and 14 in accordance with the Examiner's suggestion.

The Examiner states that at claim 3, line 10, "the preceding control data" lacks proper antecedent basis and should be "a preceding control data". Claim 3 has been amended in accordance with the Examiner's suggestion.

The Examiner states that at claim 6, line 8, "the same as in kind" is vague and indefinite. Claim 6 has been amended to further define "a plurality of layers" as --a plurality of layers of different types-- and to replace "being the same in kind" with --of a same type--.

The Examiner states that at claim 10, line 1, "methods" should be



--method--. Claim 10 has been amended in accordance with the Examiner's suggestion.

The Examiner states that at claims 10-12, line 4, "first control data" should be "a first control data." Claim 10 has been amended in accordance with the Examiner's suggestion.

The Examiner states that at claims 10-12, lines 7-11, the limitation is unclear to the Examiner, and that the Examiner interprets the limitation to mean that a comparison is made between the stored control data and the control data in the next header data. Claim 10 has been amended to address the Examiner's concern and to more particularly point out applicant's invention.

It is respectfully submitted that the Examiner is incorrect in interpreting the limitation of claim 10, as originally filed, to mean that a comparison is made between the stored control data and the control data in the next header data. Claim 10 is directed toward a picture *decoding* method where the encoded picture signal is decoded by using the (first) stored control data when *none* of the control data is existent in the next header data. Amended claim 10 is directed toward a picture decoding method where the encoded picture signal is decoding by using the stored first control data when a control data does not exist in a next header data of a layer of a same type as said predetermined layer.

The Examiner states that at claim 10, line 8, "the stored control data" should be -the stored first control data--. Claim 10 has been amended in accordance with the Examiner's suggestion.

The Examiner states that at claim 10, line 11, "the same in kind to" is vague and indefinite. Claim 10 has been amended to replace "a plurality of layers" with --a plurality of layers of different types-- and to replace "being the same in kind to" with --as a same type as--.

The Examiner states that at claim 10, line 8, "the same as in kind to" is vague and indefinite. It is respectfully submitted that no such language appears at claim 10, line 8. Similar language does, however, appear at claim

a

13, line 9. Accordingly, claim 13 has been amended to replace "a plurality of layers" with --a plurality of layers of different types-- and to replace "being the same in kind" with --of a same type--.

It is respectfully submitted that the above-described amendments to the claims 1, 3, 6, 10 and 13 overcome the Examiner's rejection under 35 U.S.C. §112, second paragraph.

The Examiner has rejected claims 1-14 under 35 U.S.C. §102(e) as being anticipated by Siracusa et al. (U.S. Patent No. 5,289,276).

The Examiner states that Siracusa et al. discloses a picture encoding apparatus for forming an encoded picture signal of a layer structure composed of a plurality of layers (col 1, lines 34-55), comprising memory means for storing a first control data included in header data (col 6, lines 5-28), comparator means for comparing the first control data with a second data (col 7, lines 39-59), and encoder means operated to transmit as in the manner (col 7, lines 60-68; col 8, lines 1-56) indicated in claims 1 and 8.

The Examiner's rejection of claims 1, 2, 8 and 9 under 35 U.S.C. §102(e) is respectfully traversed. Notwithstanding applicant's traverse claims 1, 2, 8 and 9 have been amended to more particularly point out applicant's invention. Therefore, applicant's arguments in response to the Examiner's rejection are with reference to such amended claims.

The Examiner additionally states that Siracusa et al. further discloses a picture encoding apparatus and method wherein the layer structure is in accordance with MPEG protocols (col 1, lines 34-54) as in claims 2 and 9.

Amended claim 1 and amended dependent claim 2 are directed toward a picture encoding apparatus which includes encoding means for transmitting neither the identification data nor the second control data when the first control data and the second control data are the same, and for transmitting both the identification data and the second control data when the first control data and the second control data are different from each other. Amended claim 8 and amended dependent claim 9 are directed toward a picture encoding method including the steps of comparing first control data, which is

a

included in header data of a predetermined layer subsequent to identification data, with second control data included in a next header data of said predetermined layer subsequent to the identification data, and encoding the identification data and the second control data only when the first control data and the second control data are different from each other.

In contrast, Siracusa et al. teaches at column 6, lines 8-15:

Element 105, responsive to the identifying indicia captures and stores certain of the header information in a memory element 110. *Data stored in element 110 will be included in the transmitted data a plurality of times to provide a degree of information redundancy.* The data selected for redundant transmission generally includes sequence header data, GOP header data, and Picture header (PICT) data (emphasis added).

Thus, Siracusa et al. teaches a system which not only operates differently from applicant's claimed invention, but which also does not achieve the same result as applicant's invention, that is, a minimization of the amount of the header data to be transmitted.

Regarding claims 3-5 and 10-12, the Examiner states that Siracusa et al. discloses a picture decoding apparatus and method for decoding a picture signal comprised of layers (col 1, lines 34-54), with memory means for storing control data included in header data of a layer (col 9, lines 25-68), and decoding means as in the manner specified (col 10, lines 44-64) as in claims 3 and 10. The Examiner further states that the Siracusa et al. decoder detects the loss of control data (col 10, lines 20-44) as in claims 4 and 9, and that the Siracusa et al picture decoder operates on MPEG protocols (col 10, lines 50-66) as in claims 5 and 10.

It is respectfully submitted that amended claims 3-5 and 10-12 are not anticipated by Siracusa et al. In further detail, amended claims 3-5 are directed toward a picture decoding apparatus for decoding an encoded picture signal, including memory means for storing control data included in header data of a predetermined layer and subsequent to identification data, and decoding means for decoding the encoded picture signal by using, when a

a

next header data of said predetermined layer does not contain control data, a preceding control data stored in said memory means.

In contrast to applicant's invention as set forth in claims 3 and 10, Siracusa et al. teaches, at column 10, lines 49-49:

If there has been a *loss*, the Sequence Header, processing is reset (545), else data is extracted from the AUX cell to continue processing of the Sequence Header, a check on the cell continuity is performed (540)...

Before MPEG data packets are used a check is made (600) for lost continuity. If there is a *loss*, an error code is provided...(emphasis added).

Thus, Siracusa et al. is concerned with detecting a loss and responding to such loss. In contrast, applicant's invention as set forth in amended claim 3 decodes the encoded picture signal by using a preceding control data stored in said memory means when a next header data of said predetermined layer does not contain control data. It is respectfully submitted that whether or not a next header data contains control data is different from whether there has been a loss of data.

Similarly, amended claims 10-12 are directed toward a picture decoding method which includes the step of decoding the encoded picture signal by using the stored first control data when a control data does not exist in a next header data of a layer of a same type as said predetermined layer.

Regarding claims 6-7 and 13-14, the Examiner states that the Siracusa et al. picture encoder and decoder is operable upon a first picture encoded signal and a second picture encoded signal having no control data (col 7, lines 13-38; col 1, lines 34-54) as in claims 6, 7, 13, and 14.

Claims 6 and 7, however, are directed toward a picture recording medium, and the Examiner has not alleged that Siracusa et al. teaches such a medium. Furthermore, amended claims 6 and 7 are directed toward a picture recording medium having an encoded picture signal layer structure composed of a plurality of layers of different types, including a second encoded picture signal of a layer of a same type as said predetermined layer and following said first encoded picture signal, wherein said second encoded picture signal

A

omits the identification data and the control data. Siracusa et al. does not teach or suggest such a structure.

With regard to claims 13 and 14, amended claims 13 and 14 are directed toward a picture signal transmission method for transmitting encoded picture data of a layer structure composed of a plurality of layers of different types, including the step of transmitting a second encoded picture signal of a layer of a same type as said predetermined layer and including none of an identification data of the second encoded picture signal and none of a control data of the second encoded picture signal.

In contrast, Siracusa et al. does not teach or suggest such a method for reducing the amount of data transmitted when transmitting encoded picture data.

In view of the above, it is respectfully submitted that amended claims 1-14 are in condition for allowance. The Examiner's reconsideration and further examination are respectfully requested.

Respectfully submitted,
LIMBACH & LIMBACH

Dated: February 10, 1995

By: Charles P. Sammut
Charles P. Sammut
Reg. No. 28,901

Attorneys for Applicant

Atty Docket No. SONY-P4021

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks,	
Washington, DC 20231 on <u>February 10, 1995</u>	
LIMBACH & LIMBACH	
Dated: <u>2/15/95</u>	By: <u>Karen Solomon</u>
	Name

R